Applicant: Cornelia Antonie Maria Jaspers **Application No.:** 10/519,063

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in

the application:

Listing of Claims:

What is claimed is:

1. (Currently Amended) A method for signal processing, wherein a sensor

signal of an image sensor is provided as an input and wherein the input is

reconstructed in a filter to establish an output for further processing, wherein the

filter comprises <u>a</u> at least one reconstruction-filter selected from the group

consisting of: a luminance-reconstruction-filter, a red-green-blue-color-

reconstruction-filter and a contour-reconstruction-filter, wherein the input

comprises a plurality of pixels, and a pixel provides a color value assigned to at least

one of the colors red, green or blue, characterized by and wherein the method

comprises the steps of; applying the luminance-reconstruction-filter reconstruction

filter to an array of pixels of predetermined array size comprising a number of

pixels, wherein at least one of the number of pixels is formed by a re-red pixel

assigned to the color of red, at least one of the number of pixels is formed by a blue-

pixel assigned to the color of blue, and at least one of the number of pixels is formed

by a green-pixel assigned to the color of green, weightening weighting the red-

and/or the blue-pixel by a green-parameter, and summarizing the pixels of the array

applying the contour reconstruction filter by multiplying pixels of the array by

contour reconstruction filter coefficients after weighting by the green parameter and

summing the multiplied pixels into one output-pixel, and wherein the method

comprises centering the output-pixel in the array, and applying the contour-

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reconstruction-filter in parallel with the color-reconstruction filter application of the

colour-reconstruction filter to the pixels.

2. (Cancelled)

3. (Currently Amended) The method as claimed in claim 1, characterized by

also comprising applying the luminance-reconstruction-filter to an array-size of

2.times.2 or 4.times.4 or 6.times.6 by summing the pixels of the array after

weighting by the green parameter into one luminance reconstruction output-pixel.

4. (Cancelled)

5. (Withdrawn) The method as claimed in claim 4, characterized by

combining the luminance-reconstruction-filter and the low-pass-filter into one single

filter.

6. (Withdrawn) The method as claimed in claim 1, characterized by applying

the color-reconstruction-filter to an array-size of 3.times.3 or 5.times.5, in particular

has to array-size of 5.times.5 in case of a heavy sensor matrix.

7. (Withdrawn) The method as claimed in claim 14, characterized by

applying subsequent to a false-color-filter a post-filter of 2.times.2 array-size, to

position a center-output-pixel of a predetermined small array of green-pixels in

phase with a white-pixel which is centered with respect to the same array as that to

which the luminance-reconstruction-filter has been applied to.

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8. (Withdrawn) The method as claimed in claim 1, characterized by applying

the contour-reconstruction-filter, in parallel with the luminance-reconstruction-

filter and by adding their reconstructed signals thereafter.

9. (Withdrawn) The method as claimed in claim 1, characterized by applying

the contour-reconstruction-filter to an array-size, which exceeds the size of an array

to which the color-reconstruction-filter is applied to.

10. (Withdrawn) The method as claimed in claim 1, characterized by

applying the contour-reconstruction-filter to an array-size of 5.times.5, in particular

to an array-size of 4.times.4 or 6.times.6.

11. (Withdrawn) The method as claimed in claim 1, characterized by offering

various luminance-reconstruction-filters for appliance, in particular by applying a

luminance-reconstruction-filter to an array size of 2.times.2 in case of no or slight

optical low pass filtering and/or applying a respective luminance-reconstruction-

filter is applied to an increased array-size of 4.times.4 or 6.times.6 upon heavier

optical low pass filtering.

12. (Withdrawn) The method as claimed in claim 1, characterized by offering

various color-reconstruction-filters are offered for appliance, in particular by

applying a 3.times.3-color-reconstruction-filter in case of a 4.times.4-luminance-

reconstruction-filter and/or applying a 5.times.5-color-reconstruction-filter in case of

a 6.times.6-luminance-reconstruction-filter.

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13. (Withdrawn) The method as claimed in claim 1, characterized by offering

various contour-reconstruction-filters for appliance, in particular by applying a

4.times.4-contour-reconstruction-filter in case of a 3.times.3-color-reconstruction-

filter or applying a 6.times.6-contour-reconstruction-filter in case of a 5.times.5-

color-reconstruction-filter.

14. (Withdrawn) The method as claimed in claim 1, characterized by

applying a 3.times.3-color-reconstruction-filter in combination with a 5.times.5

contour-reconstruction-filter, in particular by adding subsequently a color-

reconstructed and a contour-reconstructed signal for further processing.

15. (Withdrawn) An apparatus for signal processing, which is in particular

adapted to execute the method as claimed in claim 1, comprising an image sensor

for providing a sensor signal as an input and a filter for reconstructing the input to

establish an output for further processing, wherein the filter comprises at least one

reconstruction-filter selected from the group consisting of: a luminance-

reconstruction-filter, a red-green-blue-color-reconstruction-filter and a contour-

reconstruction-f- ilter, wherein the input comprises a plurality of pixels, and a pixel

provides a color value assigned to at least one of the colors red, green or blue,

characterized in that the reconstruction-filter is adapted to be applied to an array of

pixels of predetermined array size comprising a number of pixels, wherein at least

one of the number of pixels is formed by a red-pixel assigned to the color of red, at

least one of the number of pixels is formed by a blue-pixel assigned to the color of

blue, at least one of the number of pixels is formed by a green-pixel assigned to the

color of green and the apparatus is further comprising: means for weightening the

red- and/or the blue-pixel by a green-parameter, means for summarizing the pixels

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of the array into one output pixel, and means for centering the output pixel in the

array and means for parallel processing of the contour-reconstruction-filter and a

color-reconstruction-filter.

16. (Withdrawn) A computer program product storable on medium readable

by a computing system, in particular a computing system of a camera, comprising a

software code section which induces the computing system to execute the method as

claimed in claim 1 when the product is executed on the computing system, in

particular when executed on a computing system of a camera.

17. (Withdrawn) A computing system and/or semiconductor device, in

particular a computing system of a camera, for executing and/or storing a computer

program product as claimed in claim 18 thereon.

18. (Withdrawn) A camera comprising an optical system, an image sensor

and an apparatus as claimed in claim 16.

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